



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

QUARTERLY JOURNAL  
OF THE  
STATISTICAL SOCIETY OF LONDON.

---

JULY, 1839.

---

*Report of a Committee of the Statistical Society of London, appointed to collect and enquire into Vital Statistics, upon the Sickness and Mortality among the Metropolitan Police Force.—May, 1839.*

*[Read before the Statistical Society of London, on the 17th June, 1839.]*

AT the request of the Committee of "Vital Statistics," the Commissioners of the Metropolitan Police have been so liberal and obliging as to transmit, to the Statistical Society of London, most ample returns of the sickness and mortality experienced by the force under their charge, from its institution to the end of the year 1838. A careful investigation of these returns has afforded ground for the following remarks, to which have been appended four tables of classified results.

The Metropolitan Police Force was embodied in the year 1830, and had subsisted eight entire years at the end of the year 1838. The average strength of the force during the eight years was 3,314, the numbers being very nearly stationary throughout the whole period. This force is distributed in 17 divisions, distinguished by different letters of the alphabet, each being attached to a particular locality or district of London. The strength of each division averages 195 men: the smallest division is that of Whitehall (A), consisting of 116 men; the largest is that of Stepney (K), consisting of 290 men.

In order to maintain the average strength of 3,314 men, it is found necessary to recruit annually as many as 1,100 new members, the vacancies being created by 1,068, who are removed or retire from the force, and 32 who die, every year. The average duration of the service of each policeman is consequently three years. The average age at which the men enter is  $28\frac{1}{2}$  years; about two-thirds enter between the ages of 20 to 31, and the remainder, with a very few exceptions, enter between the ages of 31 and 35 years. The few who have been admitted above that age were chiefly old officers who were attached to the police offices before the formation of the Metropolitan force. The proportional numbers retiring at different ages agree very nearly with the proportions admitted at the same ages; at least, such is the case, if the ascertained ages of the 1,029 men, who retired in the single year 1838, correspond with the ages of retirement in other years, which may be presumed to be most probable.

The average number of annual deaths which occurred among the Metropolitan Police during the eight years over which the observation extends was 32; the average strength during the same time having been 3,314 men, the annual rate of mortality was consequently .97 per cent., or very nearly 1 per cent. The average age of the men being

30 years, the mortality which they suffer is very moderate, and does not exceed that of the general population of England at the same age. The mortality of the general population of London at the same age is 30 per cent. greater than that just mentioned. Considering, however, the manner in which the police force is constituted, there exists no ground for presuming that the circumstances in which they are placed are more favourable to life than the circumstances of the general population of London. It must be borne in mind that the police force is a select body; the men are first chosen as being of sound and vigorous health, and the force is afterwards kept select by frequent discharges of men showing symptoms of impaired health or strength. Hence the health of the men entering the police force is above the average; and the tendency to fall towards the general average of health is counteracted by discharging all the less healthy members.

The amount of bodily labour required from each individual of the police force is very considerable; he has to walk 20 miles every day in going his rounds, besides being obliged to attend charges at the police offices, the labour of which may be estimated as equal to walking 5 miles more—in all 25 miles a day. During two months out of every three each police constable is on night-duty, for nine hours each night, from 9 o'clock in the evening to 6 o'clock in the morning. The labour thus demanded of the police is considered by many as excessive, and detrimental to their health; such may be the fact, although the amount of sickness suffered by the police force (consisting of select lives) does not sensibly differ from that which is found to exist among the general population of London at the same age.

The chief information contained in the present police returns relates to the sickness suffered by the members. In these returns are separately stated, for each division of the police force, the number of days of sickness suffered during each month of the eight years, from 1831 to 1838. The results deducible from these statements may aid in determining the relative healthiness of the districts to which the different divisions are attached, as well as the relative healthiness of the different months of the year.

According to the present returns, out of the 17 districts to which the several divisions are attached, the most healthy are those of Whitehall, Westminster, and Kensington; and the least healthy are those of Holborn, Finsbury, and Hampstead. Throughout the eight years observed, in the total police force, without distinction of divisions or districts, the average amount of sickness suffered by each man in one year was  $10\frac{1}{4}$  days; hence the proportion of the total force constantly sick is equal to  $2\frac{1}{4}$  per cent. In the least healthy districts above-mentioned, the average yearly sickness to each man was  $12\frac{3}{4}$  days. In the three most healthy districts, there were only  $6\frac{3}{4}$  days of sickness yearly to each man. The proportion of sickness in these three last-mentioned districts, is, however, so much lower than that of any other district, without any apparent cause, that it would be premature to conclude, without further information, that the salubrity of these districts was proportional to the low degree of sickness suffered by the police located therein. The apparently high salubrity of these districts might be supposed to be consequent on some peculiar circumstances in the constitution or service of the force resident

within their limits; but the Commissioners of Police expressly state that no such circumstances exist.

With regard to the healthiness of different months or seasons of the year, the present returns afford some valuable information. The maximum sickness is suffered in the month of January, the minimum sickness in the month of June or July; the maximum being to the minimum in the proportion of more than 3 to 2. The progressive increase or decrease of sickness from month to month is sufficiently regular when no epidemics supervene; the sickness generally increasing as the temperature of the month decreases. On viewing the table of sickness formed from the monthly aggregates of the four years 1835-38, we might be justified in drawing the following conclusion,—that in healthy years, not distinguished for epidemic disease, the sickness of the police force is at a minimum at the end of the month of June; and that the sickness increases uniformly throughout the six months, measured backwards or forwards from the last day of June. The disturbing effect of the usual epidemical diseases, on the above presumed law of sickness, is to elevate considerably the maximum for January, and to elevate in a minor degree, the relative sickness of the months of April and August.

It is doubtful whether the relative healthiness of the different months of the year, is the same among the general population as in the police force. The general population being less exposed to the influence of temperature, it appears probable that their sickness will not depend so much upon temperature as does the sickness of the police. From the experience of one of the largest London Benefit Societies during four years, it is found that the maximum quarterly sickness occurs in the three months, January, February, and March, and that the minimum occurs in the three months, May, June, and July. These results for London artisans do not differ materially from the results deduced from the present police returns, and we may safely draw the conclusion, that the relative sickness of any month for the general population is greatly dependent on the temperature of that month.

Since the above Report was presented to the Council the following communication, which strongly confirms the above theory, has been received from Mr. T. R. Edmonds, a Member of the Committee on Vital Statistics:—"The accompanying extract from the Mortality Returns for Glasgow in 1838, just published by Mr. Paul, shews that the mortality of each month, in that city, follows a law similar to that of the monthly sickness of the Police Force in London. It is at a maximum in January, and at a minimum in June or July, with a gradual increase and decrease between the two extreme periods:—

| January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| 899      | 841       | 717    | 573    | 533  | 434   | 411   | 459     | 474        | 495      | 499       | 597       | 6,932  |

As the population of the city, at the same time, was estimated at 263,000, the annual rate of mortality was 2·64 per cent."

TABLE I.—Shewing the Sickness suffered by each of the 17 Divisions of the Metropolitan Police, during the Eight Years from 1831 to 1838; distinguishing the total Sickness of each Division into two periods of Four Years each, also distinguishing the Sickness of the month of January, and of the month of July, for each Division.

| Letters.  | District.       | Average Strength. | Days of Sickness suffered during |                   |                   | No. of Sick days Yearly, to each Man, upon the Average of the 8 Years. | Days of Sickness during 8 Years in the Months of |        | No. out of 100 Living, constantly sick in the Month of |       |
|-----------|-----------------|-------------------|----------------------------------|-------------------|-------------------|------------------------------------------------------------------------|--------------------------------------------------|--------|--------------------------------------------------------|-------|
|           |                 |                   | 4 Years, 1831–34.                | 4 Years, 1835–38. | 8 Years, 1831–38. |                                                                        | January.                                         | July.  | January.                                               | July. |
| A         | Whitehall . .   | 116               | 3,049                            | 3,054             | 6,103             | 6·6                                                                    | 628                                              | 423    | 2·19                                                   | 1·47  |
| B         | Westminster. .  | 163               | 4,941                            | 3,954             | 8,895             | 6·8                                                                    | 940                                              | 626    | 2·33                                                   | 1·55  |
| C         | St. James . .   | 184               | 8,046                            | 6,656             | 14,702            | 10·0                                                                   | 1,571                                            | 1,037  | 3·45                                                   | 2·28  |
| D         | Mary-le-bone .  | 161               | 7,582                            | 7,748             | 15,330            | 11·9                                                                   | 1,535                                            | 1,061  | 3·84                                                   | 2·65  |
| E         | Holborn . . .   | 163               | 10,247                           | 6,429             | 16,676            | 12·8                                                                   | 1,835                                            | 1,392  | 4·54                                                   | 3·44  |
| F         | Covent Garden . | 159               | 7,639                            | 6,888             | 14,527            | 11·4                                                                   | 1,706                                            | 1,328  | 4·33                                                   | 3·37  |
| G         | Finsbury. . .   | 230               | 11,631                           | 11,957            | 23,588            | 12·8                                                                   | 2,675                                            | 1,523  | 4·69                                                   | 2·67  |
| H         | Whitechapel. .  | 185               | 7,080                            | 6,076             | 13,156            | 8·9                                                                    | 1,381                                            | 1,156  | 3·01                                                   | 2·52  |
| K         | Stepney . . .   | 290               | 13,579                           | 11,203            | 24,782            | 10·7                                                                   | 2,704                                            | 1,804  | 3·76                                                   | 2·51  |
| L         | Lambeth . . .   | 186               | 9,129                            | 5,511             | 14,640            | 9·8                                                                    | 1,576                                            | 960    | 3·42                                                   | 2·08  |
| M         | Southwark . .   | 184               | 8,600                            | 7,489             | 16,089            | 10·9                                                                   | 1,869                                            | 989    | 4·10                                                   | 2·17  |
| N         | Islington. . .  | 268               | 11,461                           | 10,554            | 22,015            | 10·2                                                                   | 2,843                                            | 1,570  | 4·27                                                   | 2·36  |
| P         | Camberwell . .  | 238               | 9,435                            | 9,701             | 19,136            | 10·1                                                                   | 2,272                                            | 1,345  | 3·86                                                   | 2·28  |
| R         | Greenwich . .   | 207               | 10,283                           | 7,438             | 17,721            | 10·7                                                                   | 2,205                                            | 1,249  | 4·30                                                   | 2·43  |
| S         | Hampstead . .   | 219               | 9,964                            | 11,637            | 21,601            | 12·3                                                                   | 2,517                                            | 1,422  | 4·64                                                   | 2·62  |
| T         | Kensington . .  | 180               | 5,075                            | 4,650             | 9,725             | 6·8                                                                    | 1,129                                            | 723    | 2·53                                                   | 1·62  |
| V         | Wandsworth. .   | 181               | 7,150                            | 6,555             | 13,705            | 9·5                                                                    | 1,635                                            | 930    | 3·64                                                   | 2·07  |
| Total . . |                 | 3,314             | 144,891                          | 127,500           | 272,391           | 10·3                                                                   | 31,021                                           | 19,538 | 3·78                                                   | 2·38  |

TABLE II.—Shewing the Number of Days of Sickness suffered by the Total Metropolitan Police Force in the Eight Years from 1831 to 1838, arranged according to the successive Months of the Year; also shewing the resulting Proportion of the Living constantly Sick during each Month of the Year.

| Months.           | Days of Sickness suffered in the same Months of |                   |                   | Average number constantly Sick out of 100 Living. |                   |
|-------------------|-------------------------------------------------|-------------------|-------------------|---------------------------------------------------|-------------------|
|                   | 4 Years, 1831-34.                               | 4 Years, 1835-38. | 8 Years, 1831-38. | 4 Years, 1835-38.                                 | 8 Years, 1831-38. |
| January . . . .   | 13,983                                          | 17,038            | 31,021            | 4·15                                              | 3·77              |
| February . . . .  | 11,922                                          | 10,717            | 22,639            | 2·86                                              | 3·02              |
| March . . . . .   | 12,217                                          | 10,333            | 22,550            | 2·51                                              | 2·74              |
| April . . . . .   | 14,536                                          | 10,458            | 24,994            | 2·63                                              | 3·14              |
| May . . . . .     | 10,713                                          | 9,297             | 20,010            | 2·26                                              | 2·43              |
| June . . . . .    | 10,393                                          | 8,294             | 18,687            | 2·09                                              | 2·35              |
| July . . . . .    | 11,114                                          | 8,424             | 19,538            | 2·05                                              | 2·38              |
| August . . . . .  | 12,955                                          | 9,271             | 22,226            | 2·26                                              | 2·70              |
| September . . . . | 11,112                                          | 9,695             | 20,807            | 2·44                                              | 2·62              |
| October . . . . . | 10,978                                          | 10,354            | 21,332            | 2·51                                              | 2·60              |
| November . . . .  | 12,068                                          | 11,077            | 23,145            | 2·79                                              | 2·91              |
| December . . . .  | 12,900                                          | 12,542            | 25,442            | 3·05                                              | 3·10              |
| Total . . . . .   | 144,891                                         | 127,500           | 272,391           | 2·63                                              | 2·81              |

TABLE III.—Shewing the Proportion admitted at each Age, of all, 14,548, who had entered the Metropolitan Police Force, from its Institution to 31st December, 1838; also shewing the proportion removed or retired at each Age, in the Year 1838, out of a total of 1,029 retired at all Ages.

| Interval of Age. | Proportion Admitted Proportion Removed |                              |
|------------------|----------------------------------------|------------------------------|
|                  | from 1830 to 1838.                     | or Retired in the Year 1838. |
| Under 26         | 320                                    | 300                          |
| 26 to 31         | 375                                    | 397                          |
| 31, , 36         | 216                                    | 232                          |
| 36, , 41         | 63                                     | 54                           |
| Above 41         | 26                                     | 17                           |
| Total*           | 1000                                   | 1000                         |

TABLE IV.—Shewing the Number of Admissions, Removals, Retirements and Deaths; also the Number of Days of Sickness to each Man, during each Year from 1831 to 1838.

| Year. | Admitted. | Removed and Retired. | Died. | Days of Sickness Suffered. | Days of Sickness to each Man. |
|-------|-----------|----------------------|-------|----------------------------|-------------------------------|
| 1831  | 1,464     | 1,388                | 23    | 39,297                     | 11·9                          |
| 1832  | 959       | 919                  | 33    | 35,358                     | 10·7                          |
| 1833  | 995       | 958                  | 39    | 38,122                     | 11·5                          |
| 1834  | 1,033     | 986                  | 35    | 32,114                     | 9·7                           |
| 1835  | 1,146     | 1,110                | 25    | 30,497                     | 9·2                           |
| 1836  | 1,056     | 1,019                | 28    | 29,834                     | 9·0                           |
| 1837  | 1,120     | 1,085                | 39    | 34,415                     | 10·4                          |
| 1838  | 1,095     | 1,029                | 34    | 32,754                     | 9·9                           |
| Total | 8,868     | 8,494                | 256†  | 272,391‡                   | 10·3                          |

\* Average Age at admission, 28½ years.

† Average Annual Deaths during the 8 years, 0·97 per cent.

‡ Average number constantly Sick during 8 years, 2·81 per cent.